

Many clients do not have one to one or one to many assignment of roles to role owners rather they have some specific logic to define role owners. In our setup, GRC approvers are defined based on functional area, business process, connector etc. For easy maintenance of GRC approvers role-based agent rule was created.

Resolution: Create a BRF+ Agent rule that will fetch approvers, based on decision table criteria and dummy role assignment.

BRF+ Design:

Below Steps will be followed to achieve required results:

Step 1: Create Structure “AGR_USERS”

Step 2: Create a decision table to provide “dummy role name” based on suitable selection.

Step 3: Create a DB lookup on table “AGR_USERS” to fetch users assigned to appropriate dummy roles.

Step 4: Create a “Ruleset” to process DB lookup and return approvers.

BRF+ Configuration:

You have to generate the BRF+ Rule via Transaction SPRO in GRC system. Follow the below steps in your GRC system.

Run the transaction SPRO, go to IMG => Governance, Risk and Compliance =>Access Control =>Workflow for Access Control => Define Workflow related MSMP rules.

Or

Directly execute TCode GRFNMW_DEV_RULES

Fill generation criteria (Process ID, Rule type, etc.)

Specify Generation options

Generate rule shell (Execute button)

After successful rule generation, goto BRF+ to check newly created BRFPlus Application

Rule Info	
MSMP Process ID	SAP_GRAC_ACCESS_REQUEST
Rule Kind	Agents Rule
Rule ID	ZBRF_ROLEOWNER
Application/Func. Group Name	ZBRF_ROLEOWNER
Rule Type	BRFplus Flat Rule (LineItem by LineItem)
Generation of Options	
<input checked="" type="checkbox"/> Generate Rule	
<input checked="" type="checkbox"/> Gen. Result Work-area (BRF+)	
Override BRF+ Application Text	
Override BRF+ Function Text	

Function Signature update:

In BRF+ function, change the mode to “Event Mode” and activate the function as shown below.

Since Function mode has been changed to “Event mode,” the result data object has changed automatically, so it has to be reset manually

In “Signature” tab of BRF Function, change the result data object to GRFN_MW_T_AGENT_ID

Detail

Simulation | Traces | Generate | Create Code Template | Advanced Checks

Mode: Event Mode

Signature Assigned Rulesets Code Generation

Context

Add Existing Data Object | Add New Data Object | Remove |

Component Name	Type	Type
> GRAC_S_REQUEST_RULE_HEADER	Request Header	Structure
> GRAC_S_REQUEST_RULE_LINE	Access Request Line Item	Structure
> GRFN_MW_S_AGENT_ID	Result - Agent Rule	Structure

Result Data Object

Data Object: GRFN_MW_T_AGENT_ID

Create Structure:

From context menu of BRF+ application, create a Structure and bind it to AGR_USERS.

Save and activate this structure.

Create Structure

General data

Type:	Structure
* Name:	AGR_USERS
Short Text:	AGR_USERS
Text:	AGR_USERS
Application:	ZBRF_ROLEOWNER

Structure

Define Data Binding

Binding Type:	Bind to Structure Type (DDIC)
DDIC Type Name:	AGR_USERS Where-Used List

Create **Create And Navigate To Object** **Cancel**

Create a Decision Table:

From context menu of BRF+ application, create an Expression of type “Decision Table”

Create Decision Table



Type:	Decision Table
* Name:	ZROLEOWNER
Short Text:	Role Owner
Text:	Role Owner
Application:	ZBRF_ROLEOWNER
Is Reusable:	<input checked="" type="checkbox"/>

Create **Create And Navigate To Object** Cancel

Add “Condition” as well as “Result” column based on requirement

Note that AGR_NAME in result column can only be selected if structure AGR_USERS has already been created.

List of Columns

Condition Columns

Column Name	Text	Mandatory Input	Column Accessibility
<input type="radio"/> FUNCAREA	FUNCAREA	<input type="checkbox"/>	Full Access (Changes Allowed)
<input type="radio"/> BPROC	BPROC	<input type="checkbox"/>	Full Access (Changes Allowed)
<input type="radio"/> DEPARTMENT	DEPARTMENT	<input type="checkbox"/>	Full Access (Changes Allowed)
<input checked="" type="radio"/> CONNECTOR	CONNECTOR	<input type="checkbox"/>	Full Access (Changes Allowed)

Result Columns

Column Name	Text	Action Column	Mandatory Input	Column Accessibility
<input checked="" type="radio"/> AGR_NAME	AGR_NAME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Full Access (Changes Allowed)

Create dummy roles in GRC backend system and assign to approvers

Populate the decision table with business data as required

Table Contents

Table Settings				
Find:	Next	Previous		
<input type="checkbox"/> FUNCAREA	BPROC	DEPARTMENT	CONNEC...	AGR_NAME
<input type="checkbox"/> =31.01 (031.01...)	=FSCM (FSCM)		[*031*]	CSDA-CDE-GRAC-RAP-031.01-FSC...
<input type="checkbox"/> =31.01 (031.01...)	=LO-AB (LO-AB)		[*031*]	CSDA-CDE-GRAC-RAP-031.01-LOA...
<input type="checkbox"/> =31.01 (031.01...)	=SSC (SSC/Shared Service Center)		[*031*]	CSDA-CDE-GRAC-RAP-031.01-SSC...
<input type="checkbox"/> =31.02 (031.02...)	=FI (Finance+Controlling)		[*031*]	CSDA-CDE-GRAC-RAP-031.02-FI (...)
<input type="checkbox"/> =31.02 (031.02...)	=FSCM (FSCM)		[*031*]	CSDA-CDE-GRAC-RAP-031.02-FSC...

Create DB Lookup: From context menu of BRF+ application, create an Expression of type “DBLookup”

Create Database Lookup

Type:	Database Lookup
* Name:	GET_APPROVER_LOOKUP
Short Text:	GET_APPROVER_LOOKUP
Text:	:GET_APPROVER_LOOKUP
Application:	ZBRF_ROLEOWNER
Is Reusable:	<input checked="" type="checkbox"/>

Create **Create And Navigate To Object** Cancel

Add below details to the DB Lookup, here we are applying DB lookup based on result received from ZROLEOWNER on table AGR_USERS and inserting user ID into GRFN_MW_T_AGENT_ID

Save and generate the DB Lookup

Create Database Lookup

Type:	Database Lookup
* Name:	GET_APPROVER_LOOKUP
Short Text:	GET_APPROVER_LOOKUP
Text:	:GET_APPROVER_LOOKUP
Application:	ZBRF_ROLEOWNER
Is Reusable:	<input checked="" type="checkbox"/>

Create **Create And Navigate To Object** Cancel

Create Ruleset:

Click "Create and Navigate To Object"

Create Rule as below:

Create Ruleset

Type:	Ruleset
* Name:	GET_APPROVER
Short Text:	GET_APPROVER
Text:	:GET_APPROVER
Application:	ZBRF_ROLEOWNER

Create **Create And Navigate To Object** Cancel

Create Rule

Disable Rule Valid from 00:00:00 until 00:00:00

Description:

If **Assign Condition...** 

Then

(1) Change  GRFN_MW_T_AGENT_ID  after processing  GET_APPROVER_LOOKUP  Options 

Else **Add** 

OK

Detail

Show Ruleset Header **Context Overview**

Rules

Insert Rule  **Insert Exit Condition** 

Disable Rule (1) Rule: No description is available - Rule has not been defined **Options** 

Valid From / To: 00:00:00 / 00:00:00

Description:

(1) Change  GRFN_MW_T_AGENT_ID after processing  GET_APPROVER_LOOKUP

Assign the ruleset to the function

Detail

Hide Ruleset Header **Context Overview**

Enabled: Number of Rules:

Function:  ZBRF_ROLEOWNER Number of Variables:

Precondition: <Not assigned> 

Priority:

Variables	Expressions Which Initialize the Variables
(1) <Not assigned> 	(1) <Not assigned> 

Rules

Insert Rule  **Insert Exit Condition** 

Go to the function and under assigned ruleset you should be able to fine "GET_APPROVER" ruleset.

Detail

Simulation | Traces | Generate | Create Code Template | Advanced Checks

Mode: Event Mode

Signature Assigned Rulesets Code Generation

Ruleset

Create Ruleset

Name	Text	Priority	Enabled	Precondition	Status	Executable
GET_APPROVER	GET_APPROVER	[undefined]	Yes		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Simulate BRF+ rule:

Provide mandatory context values like Business Process, Functional Area, Connector.

Result

GRFN_MW_T_AGENT_ID			
LINE_ITEM_KEY	USER_ID	NOTIFY_EXT_WHO_TYPE	NOTIFY_EXT_WHO_ID
--	SAKAUSAR	--	--

The function should return users IDs of the role owner as per the settings in decision table.

Conclusion: This custom agent rule will allow us to skip standard role owner maintenance process in GRC and simply assign approvers by assigning them dummy roles created in GRC system. Dummy roles can be created as per our requirement for example based on system\client, departments, business process etc.